

From Monkey Island to Broken Age

A (very) short history of adventure game tech.

Oliver Franzke

Who the hell are you?





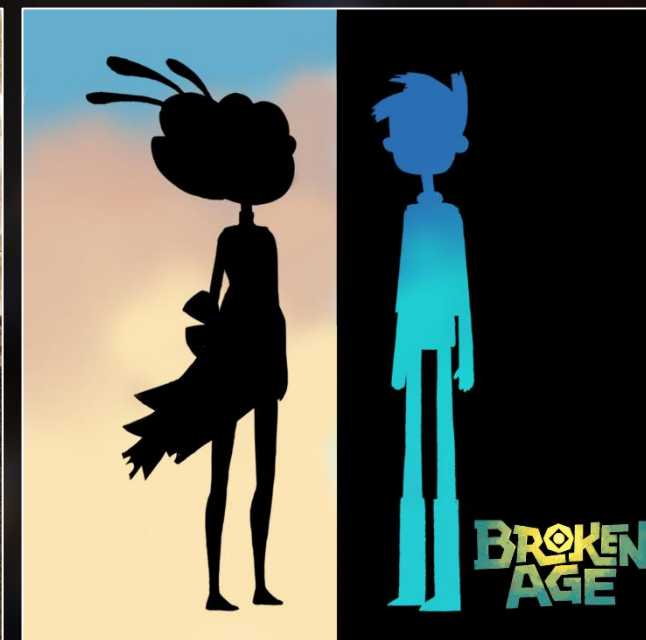
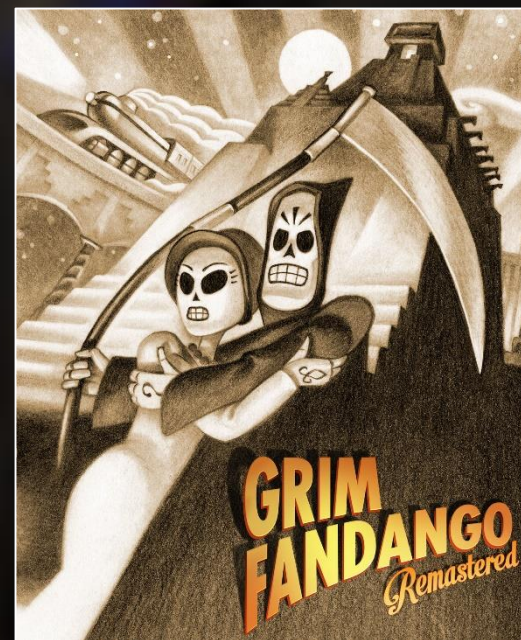
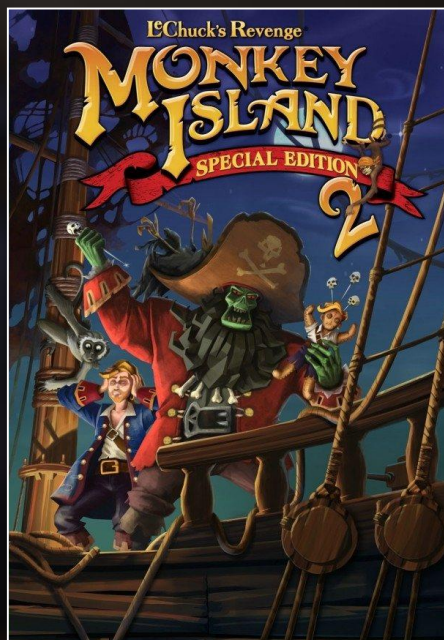
1990

1991

1993

1998

2015



2009

2010

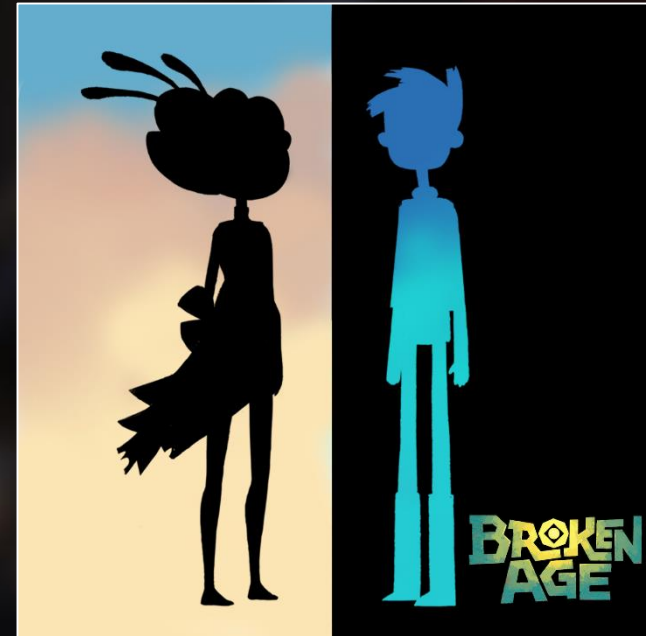
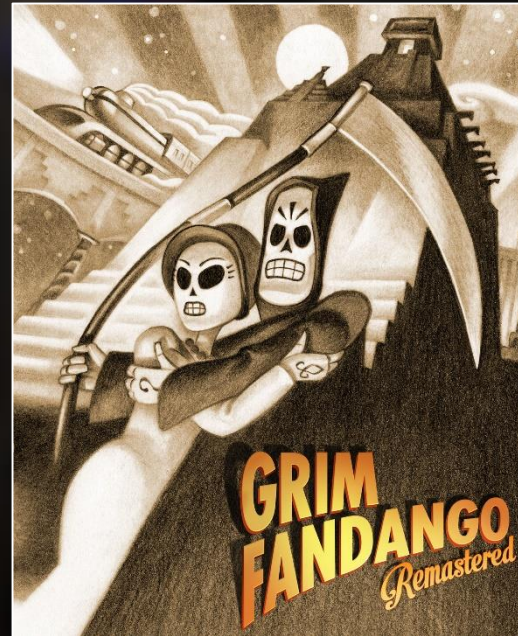
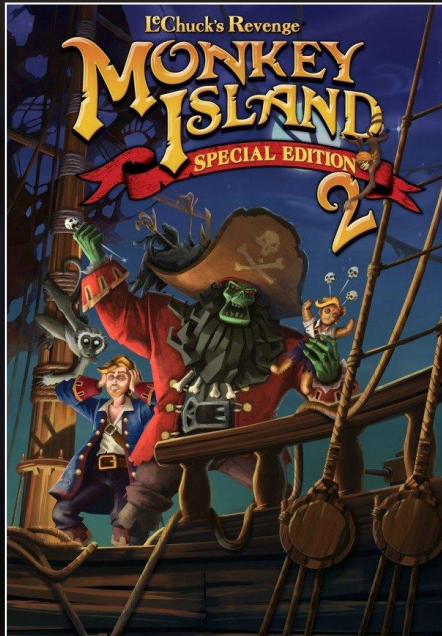
2016

2015

SCUMM

GrimE

DF Moai



SCUMM

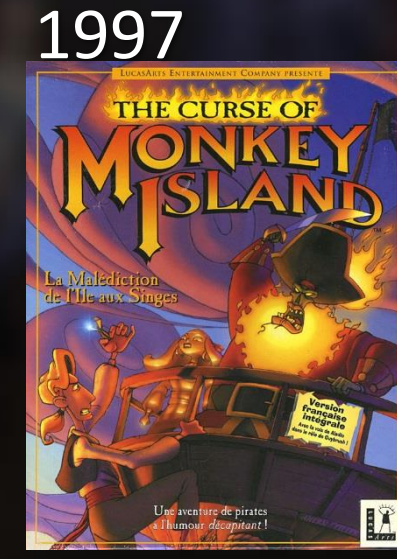
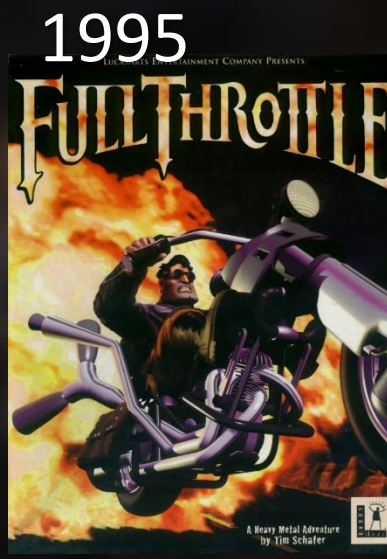
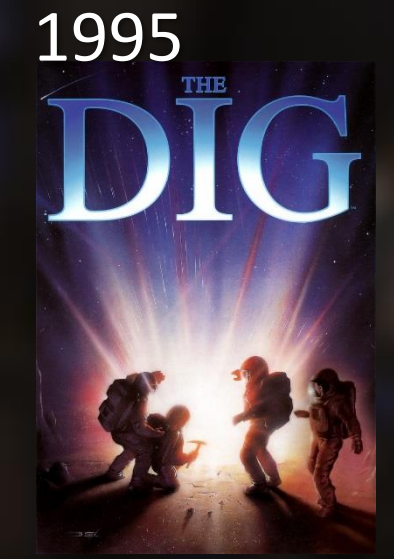
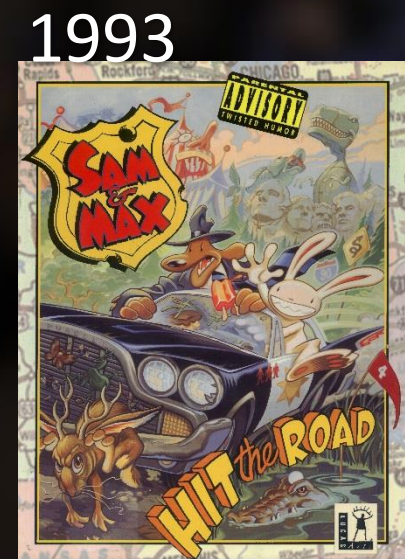
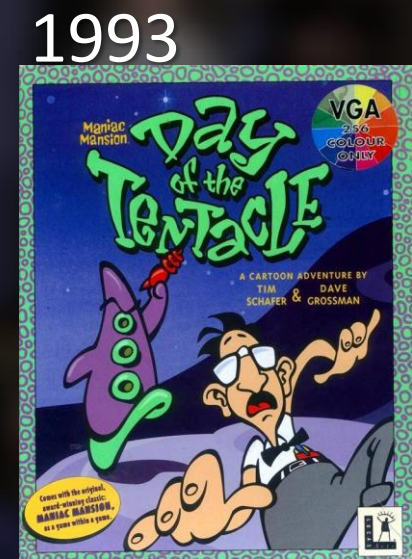
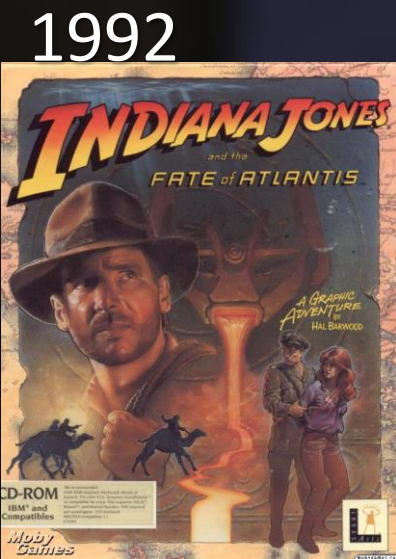
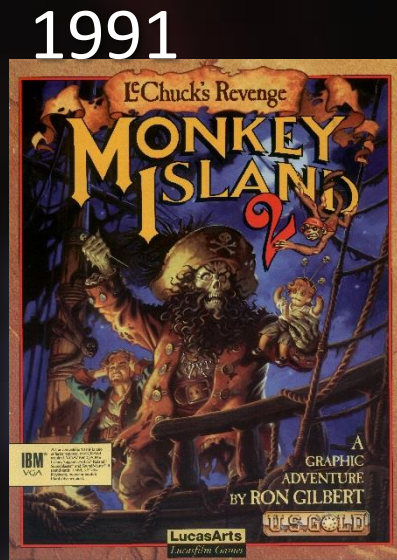
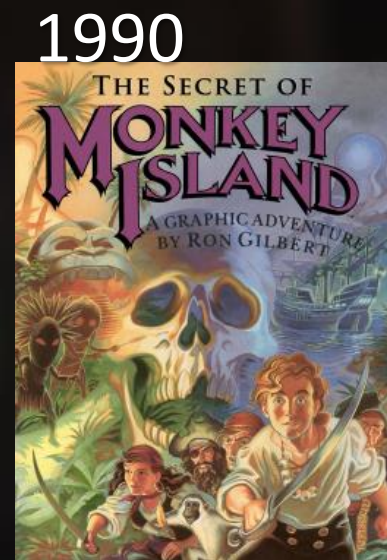
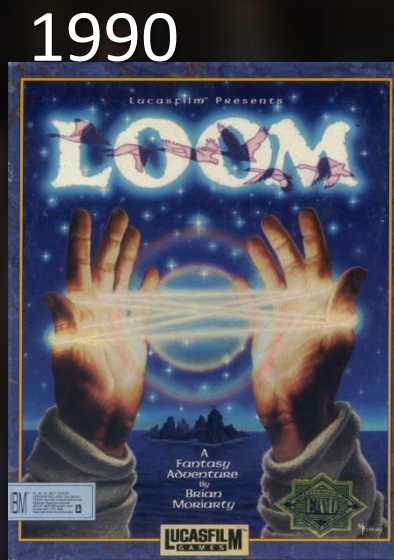
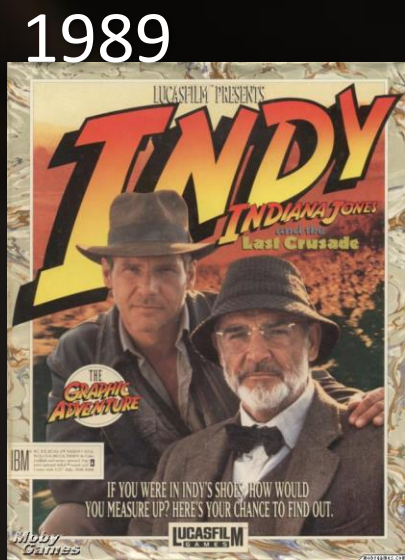
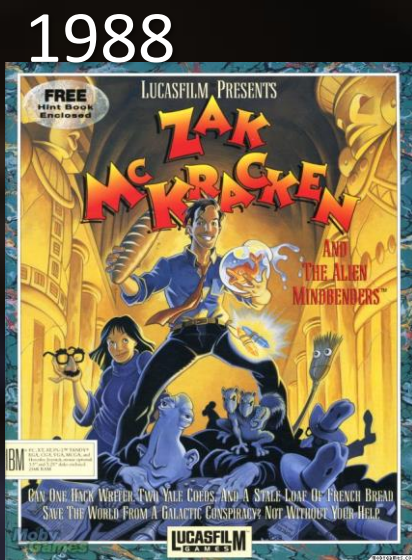
- Script Creation Utility for Maniac Mansion



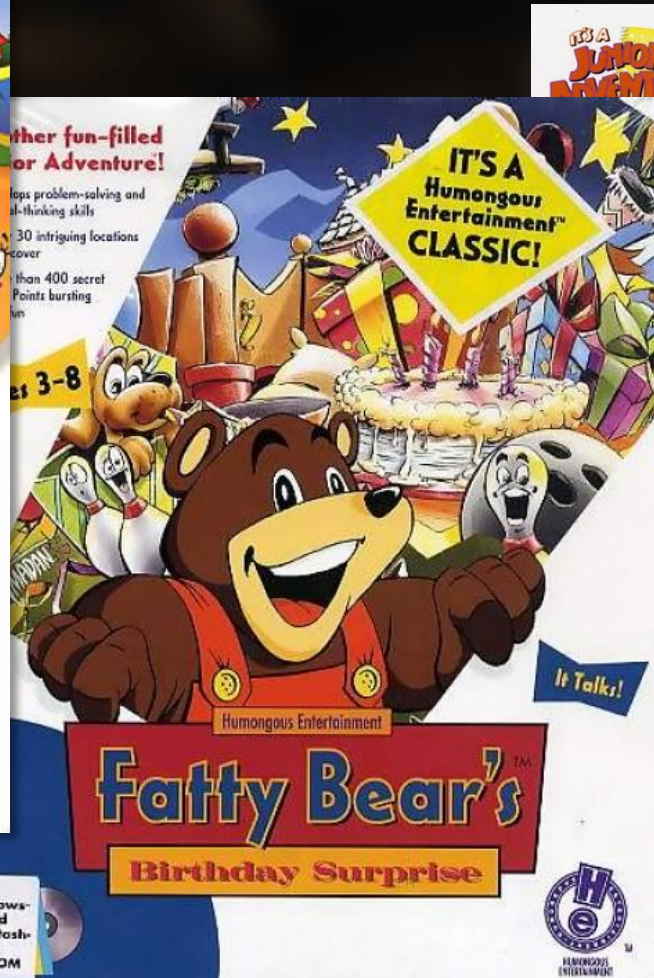
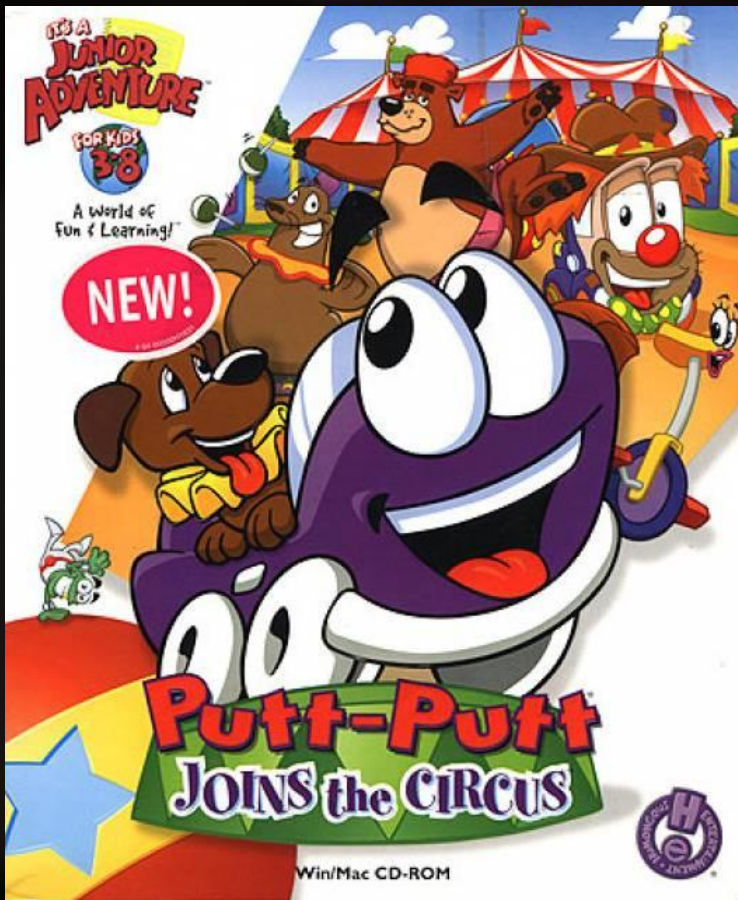
LUCASFILM
GAMES



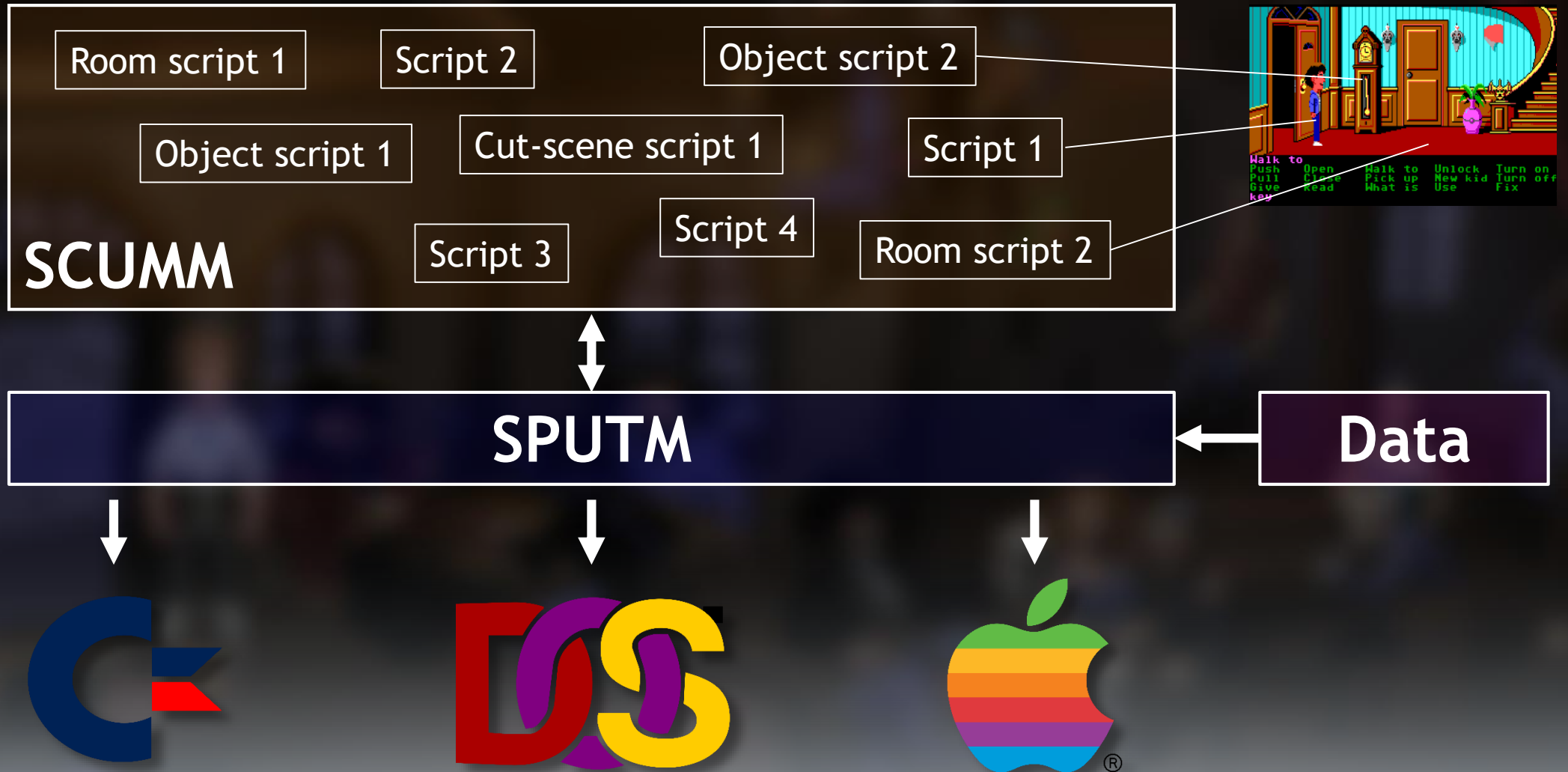
Games made with SCUMM



More games made with SCUMM



Way ahead of its time



Example script - Maniac Mansion

```
script clock-tick {  
  do {  
    clock-state = not clock-state  
    object living-room-clock state clock-state  
    play-sound clock-tick  
    break-here 60  
  }  
}
```



Walk to
Push Open Walk to Unlock Turn on
Pull Close Pick up New kid Turn off
Give Read What is Use Fix
key

Example script - Maniac Mansion

WHAT'S YOUR POINT ED?!

```
cut-scene {  
  ...  
  actor nurse-edna in-room edna-bedroom at 60,20  
  camera-follow nurse-edna  
  actor nurse-edna walk-to 30,20  
  wait-for-actor nurse-edna  
  say-line nurse-edna "WHAT'S YOUR POINT ED!!!"  
  wait-for-talking nurse-edna  
  ...  
}
```



Example script - Maniac Mansion (cont.)



```
cut-scene {  
  ...  
  actor nurse-edna in-room edna-bedroom at 60,20  
  camera-follow nurse-edna  
  actor nurse-edna walk-to 30,20  
  wait-for-actor nurse-edna  
  say-line nurse-edna "WHAT'S YOUR POINT ED!!!"  
  wait-for-talking nurse-edna  
  ...  
}
```

```
onFrame() {  
  ...  
  if(getLoc(nurse-edna) == (30,20)) {  
    if(waiting_for_line) {  
      if(doneTalking(nurse-edna)) {  
        ...  
      }  
    }  
    else {  
      sayLine(nurse-edna,  
              "WHAT'S YOUR POINT ED!!!")  
      waiting_for_line = True  
    }  
    ...  
  }  
  ...  
}
```


Become a Scummlet

http://www.wilmunder.com/Arics_World/Games.html

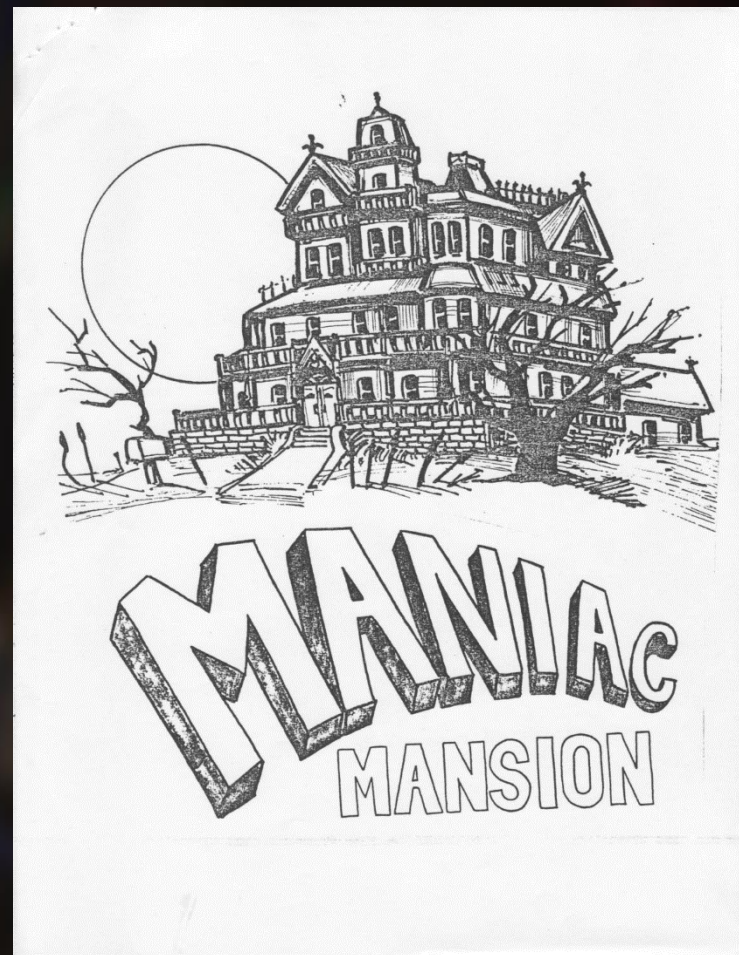
The SCUMM Manual

S.C.U.M.M. Tutorial

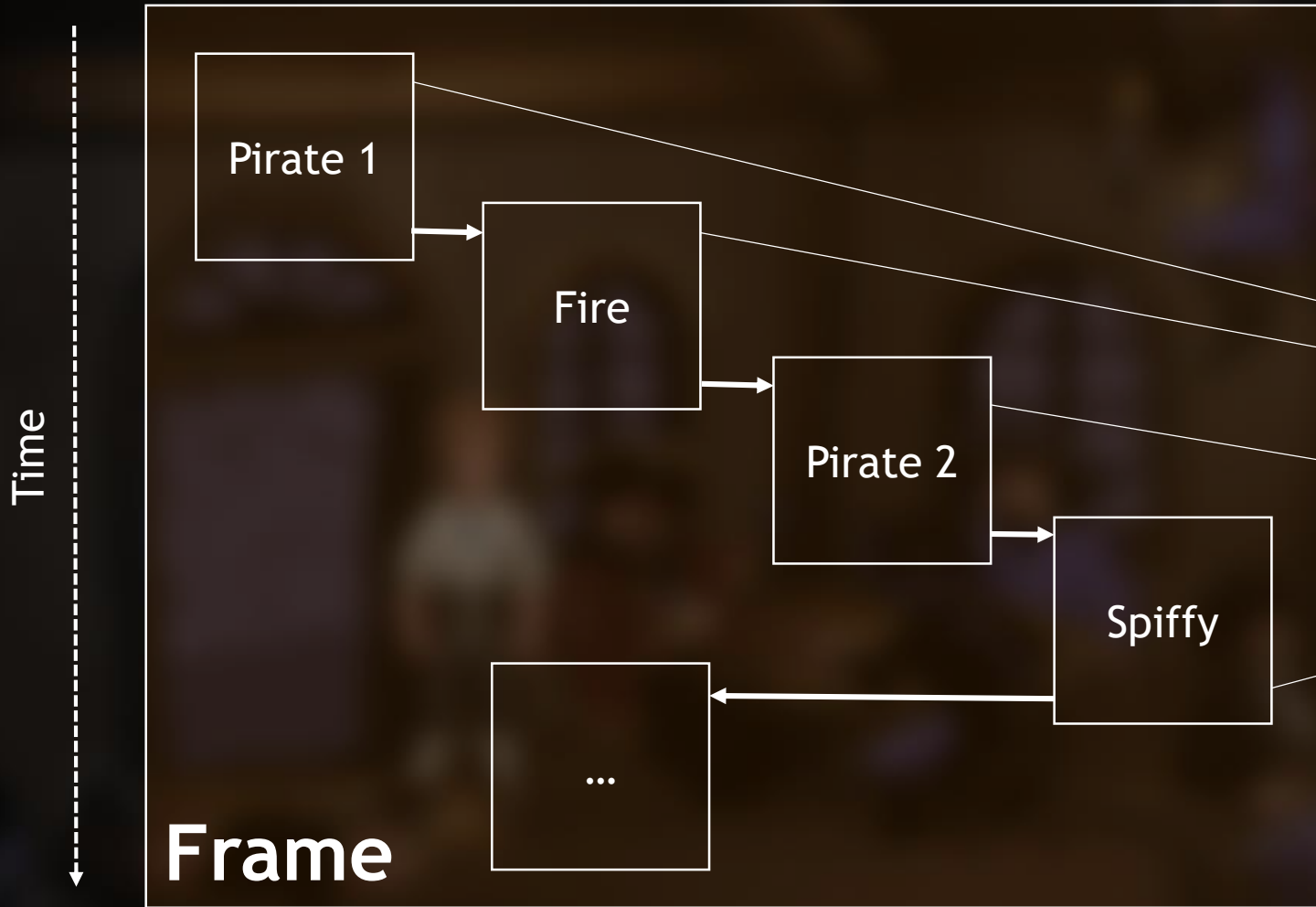
"Rising to the top of the Software Cesspool"

Wallace Poulter

Circa 1991



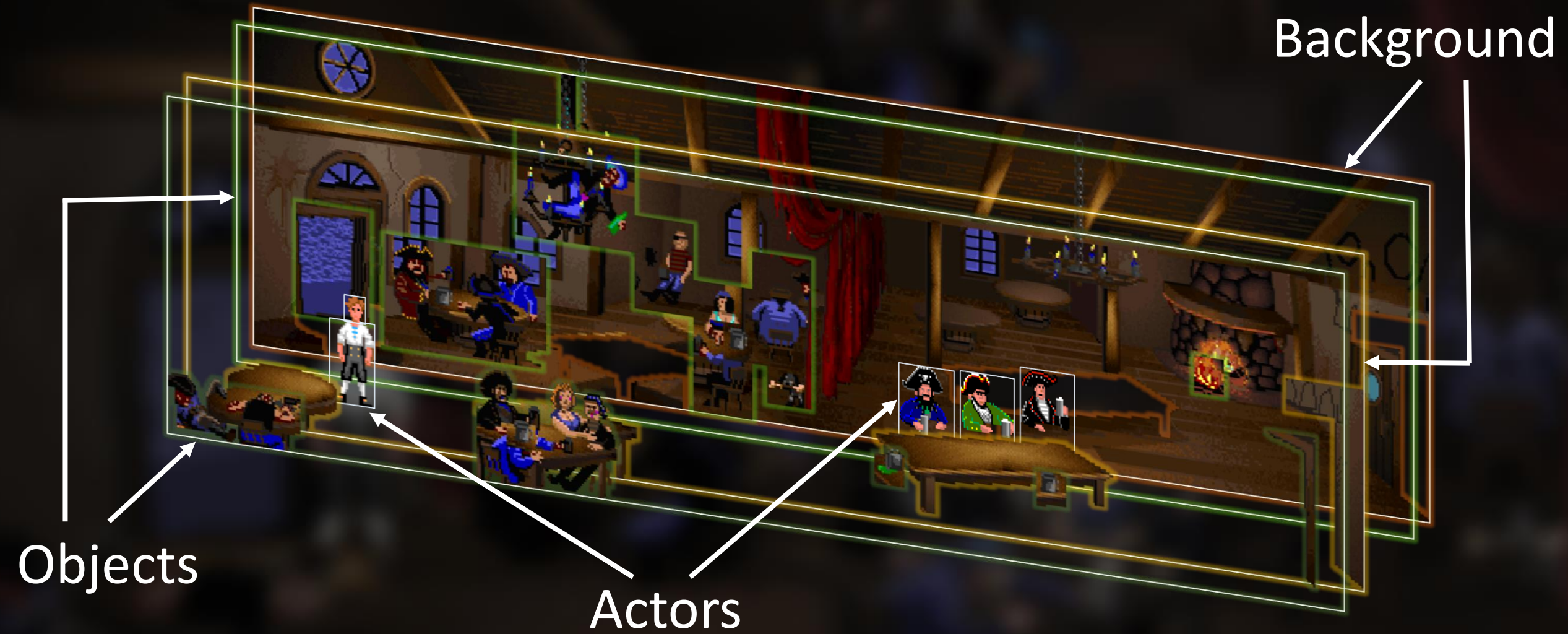
Cooperative multi-tasking



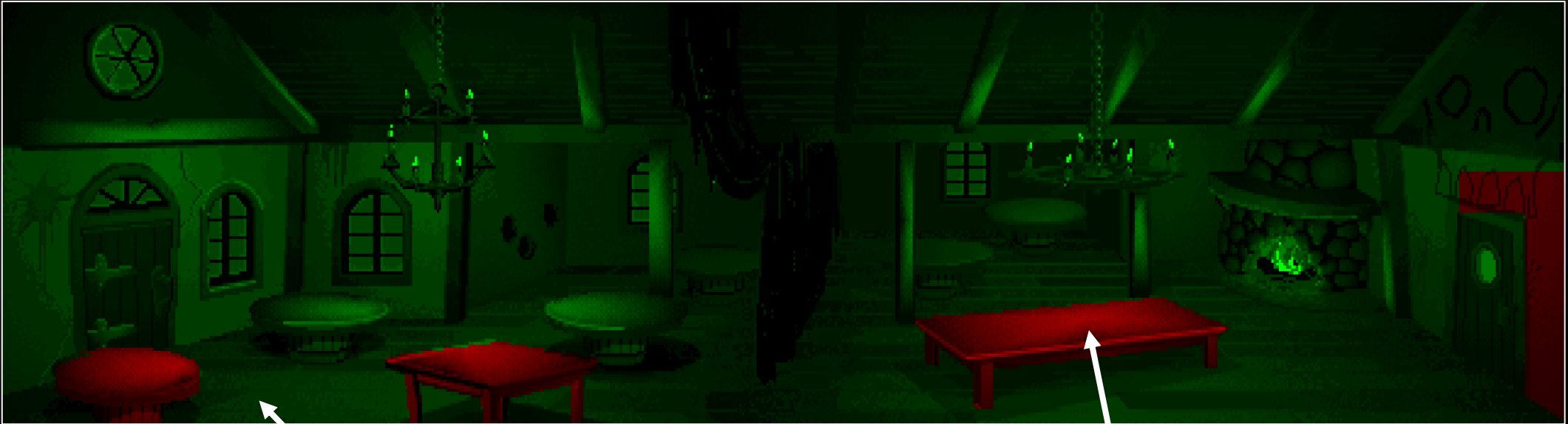
Anatomy of a 'room'



Anatomy of a 'room': Layers



Anatomy of a 'room': Layers



Layer $z=0$

Layer $z=1$

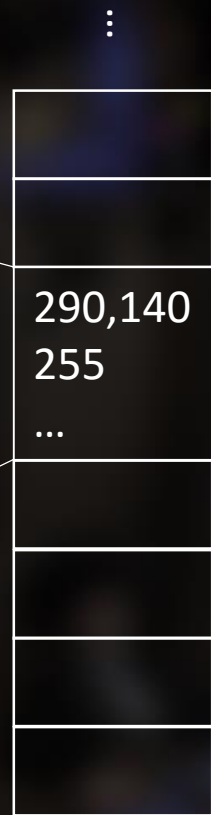
Anatomy of a 'room': Object states



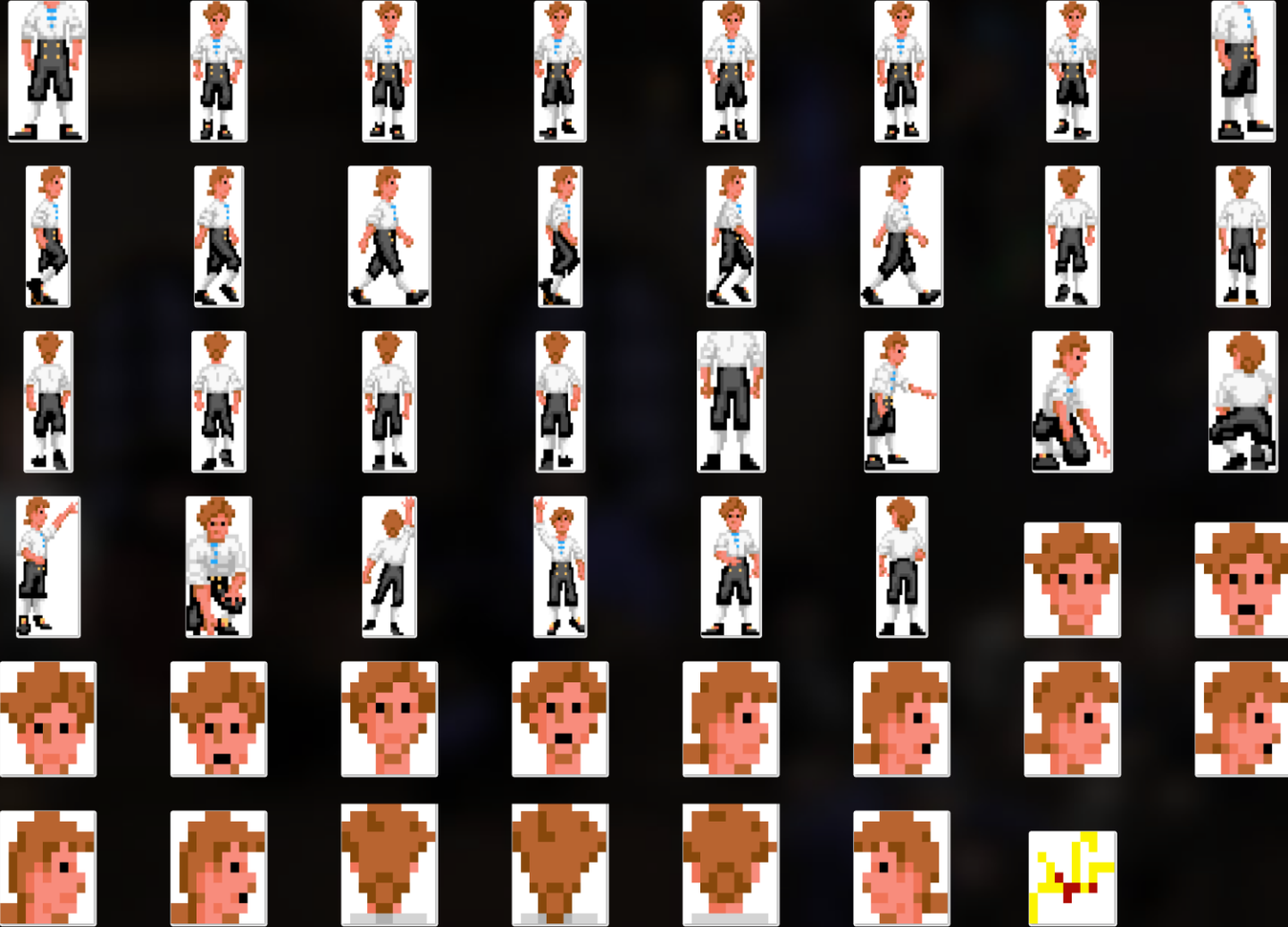
Anatomy of a 'room': Actors



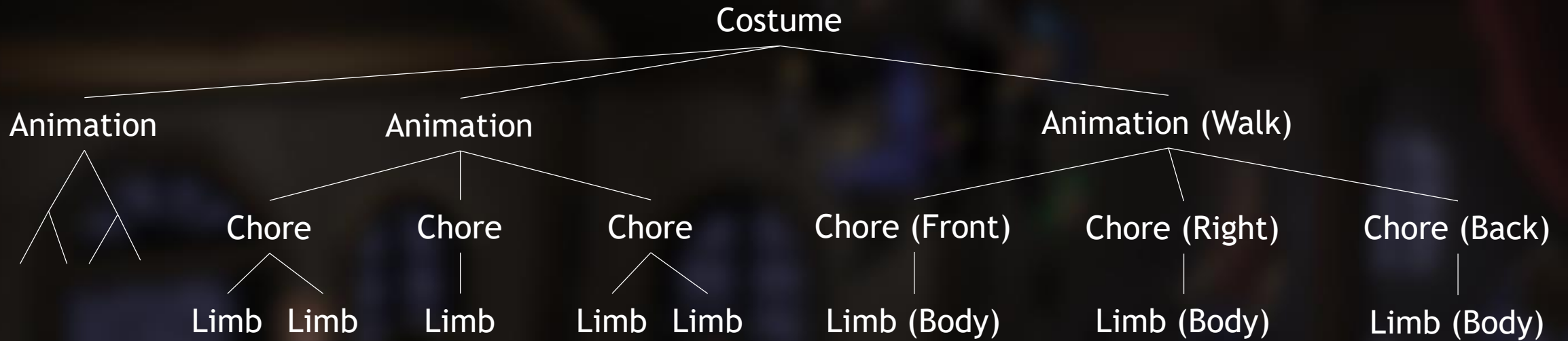
- Position
- Scale
- Room
- Costume
- Direction
- ...



Anatomy of a 'room': Costumes



Anatomy of a 'room': Costumes



Anatomy of a 'room': Walk boxes



Layer $z=0$

Layer $z=1$



LUCASARTS™

LucasArts Confirms Layoffs, Says The Dev Is Still Healthy



Brian Crecente

6/06/08 2:00pm · Filed to: LUCASARTS LAYOFFS ▾



7.1K



51



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LUCASARTS™

News of the rumored layoffs at LucasArts that we broke yesterday afternoon were confirmed today by the developer, which maintained that they remain committed to their internal studio.



Rumor: LucasArts Sees Massive Layoffs, Outsources Jobs [Updated]

We've heard from multiple sources today that LucasArts has laid off approximately 50-100 of...

[Read more](#)

"I can confirm we had layoffs yesterday they were in the studio," said LucasArts spokeswoman Margaret Grohne. "They had to do with where

iPhone

Apple reinvented the phone



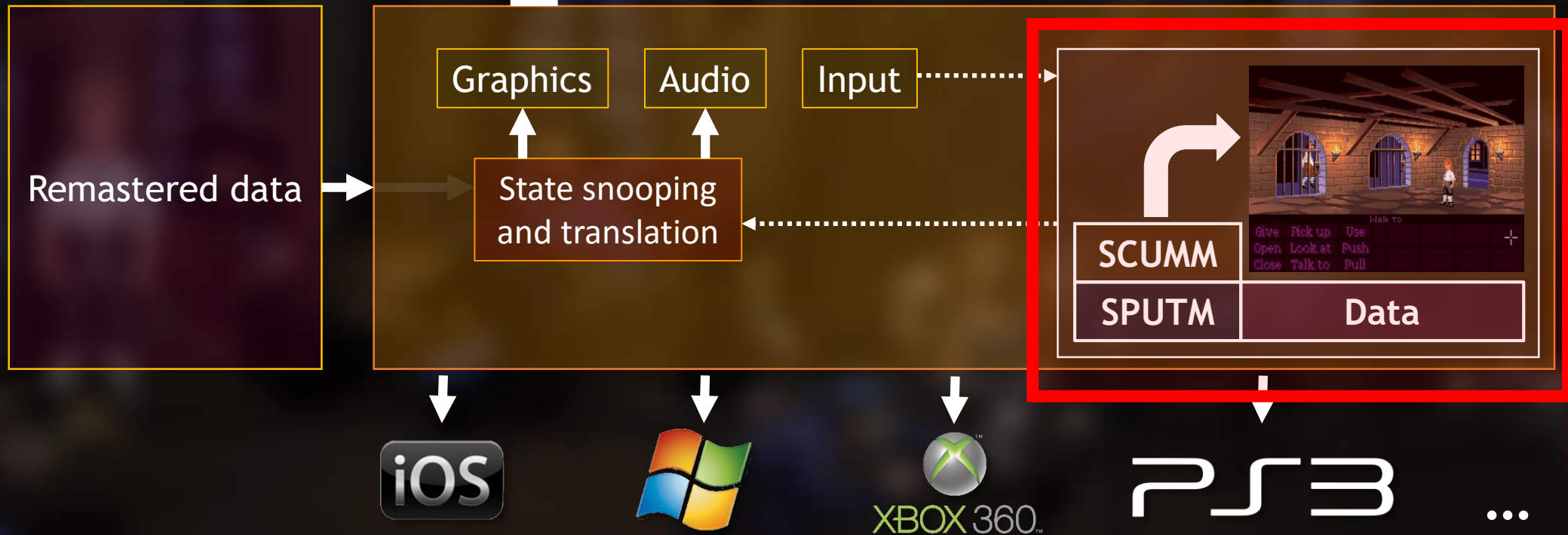


Special Edition

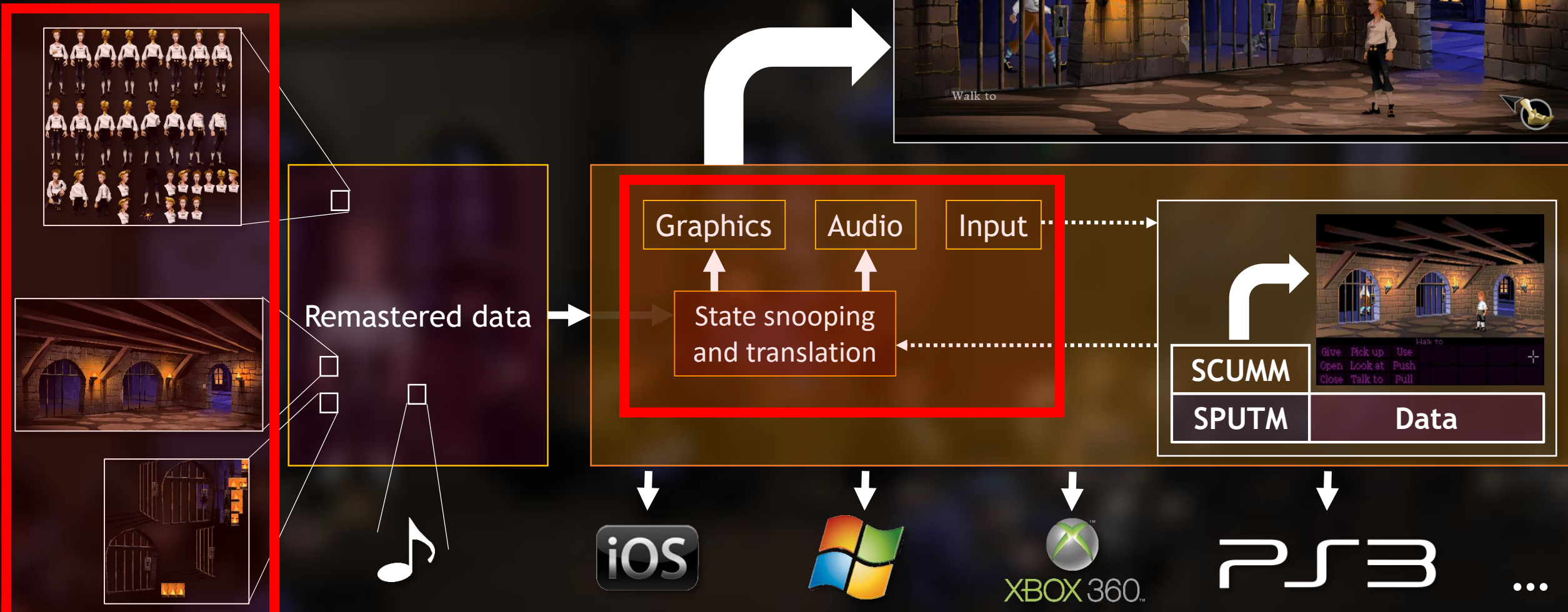


Original

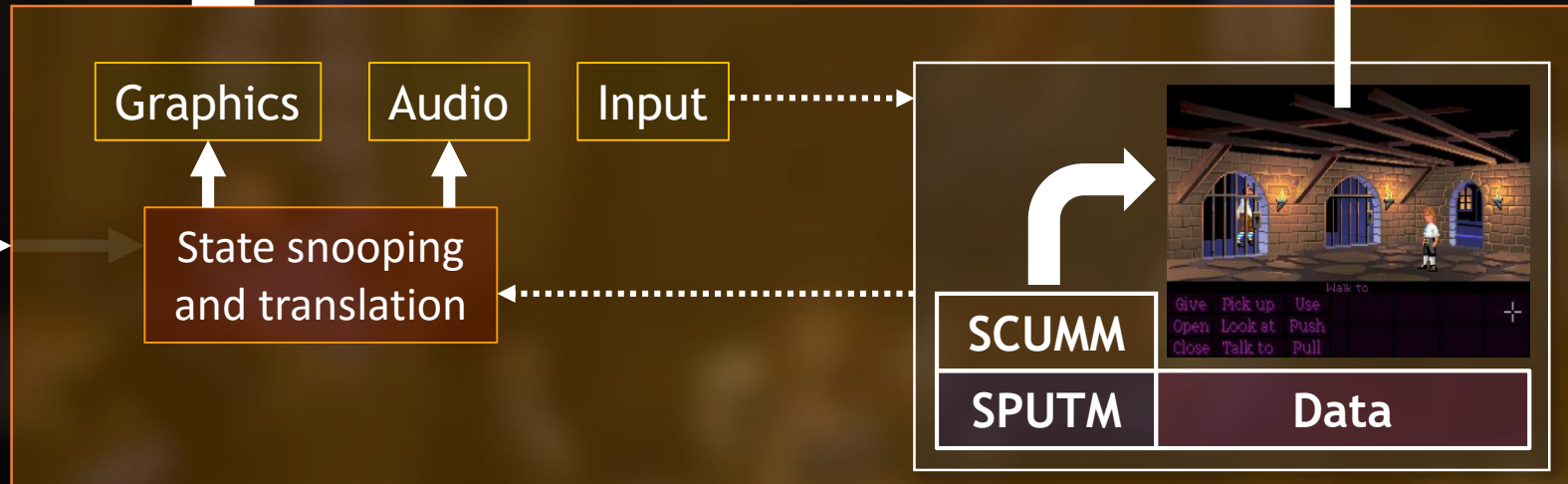
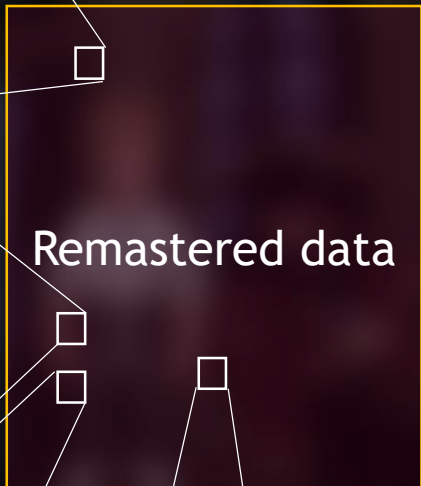
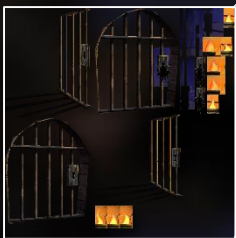
'Remonkeyed' tech



'Remonkeyed' tech



'Remonkeyed' tech



...





Special Edition



Original

Walk to



LUCASARTS ENTERTAINMENT COMPANY PRESENTS

"...GRIM FANDANGO IS THE FINEST ADVENTURE GAME OF ALL TIME."
-PC Gamer, 95%

GRIM FANDANGO

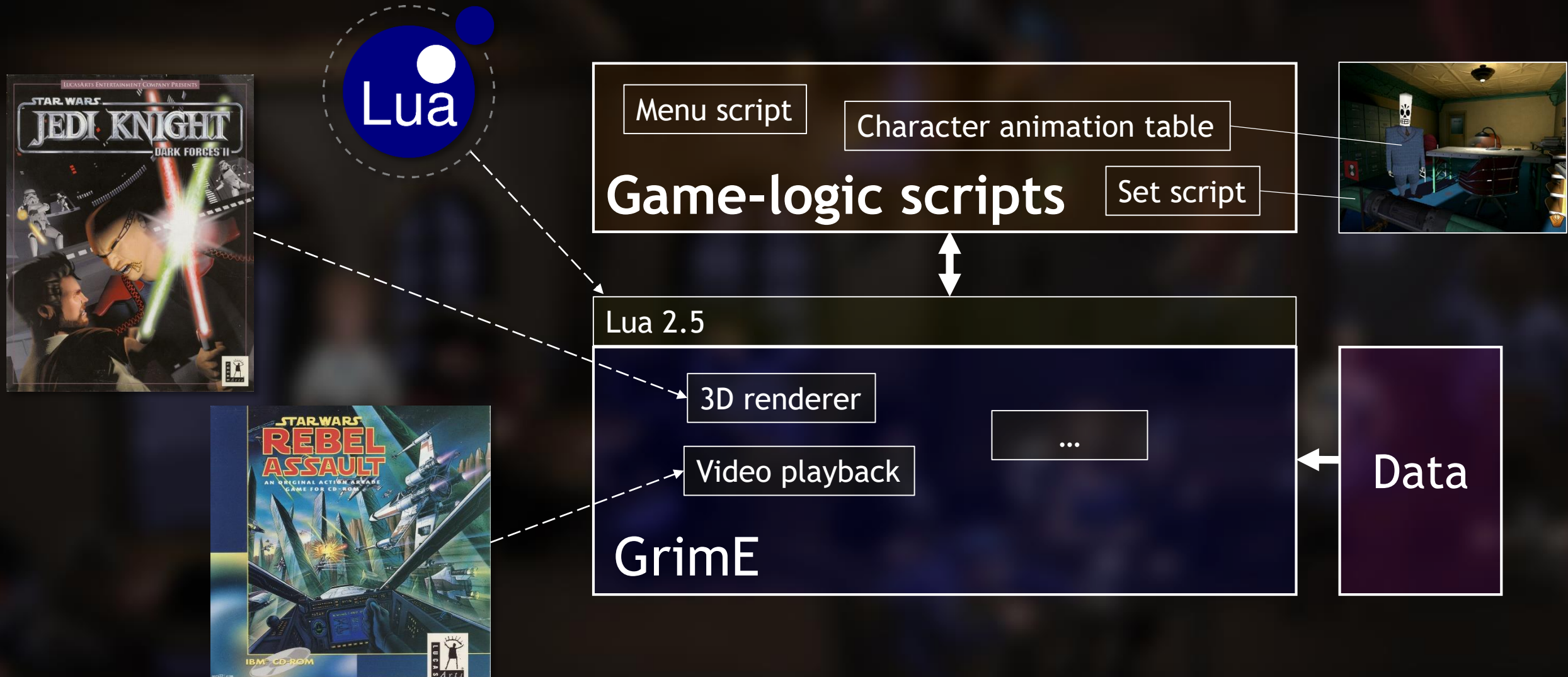
An EPIC Tale of CRIME and CORRUPTION in the LAND OF THE DEAD

The main promotional art for Grim Fandango features the characters Milla and Manny. Milla is a woman with a white skull face, wearing a purple hat and a colorful patterned dress. Manny is a man with a white skull face, wearing a white suit and a white hat. They are standing in a dark, gothic-style setting with a large, ornate archway in the background. The title "GRIM FANDANGO" is written in large, yellow, 3D letters across the top. A quote from PC Gamer is in the top right corner. The LucasArts logo is in the bottom right corner.

AN AMAZING 3D ADVENTURE BY TIM SCHAFER, CREATOR OF FULL THROTTLE™ AND DAY OF THE TENTACLE™

The LucasArts logo, featuring a stylized figure holding a torch, with the text "LUCAS Arts" below it.

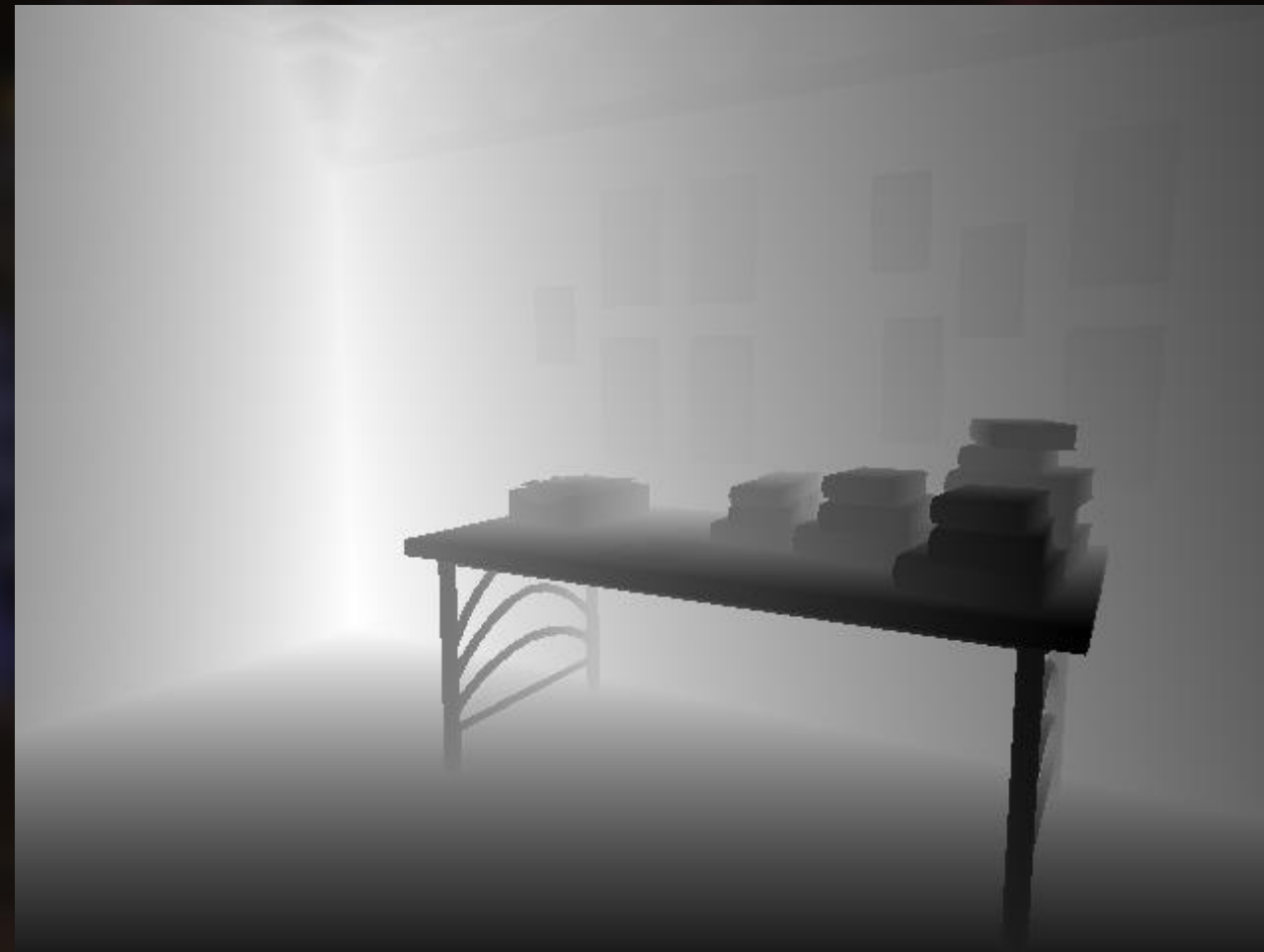
Grim Fandango engine (GrimE)



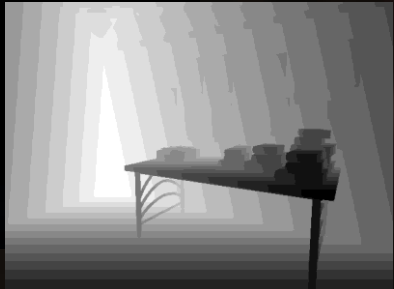
Anatomy of a set



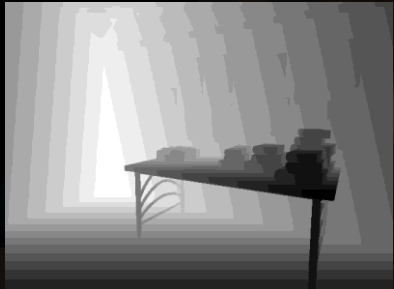
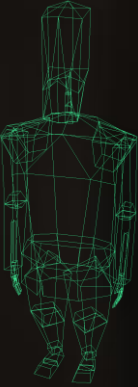
Anatomy of a set: Background



Anatomy of a set: Objects



Anatomy of a set: Actors and costumes







Original



Remastered

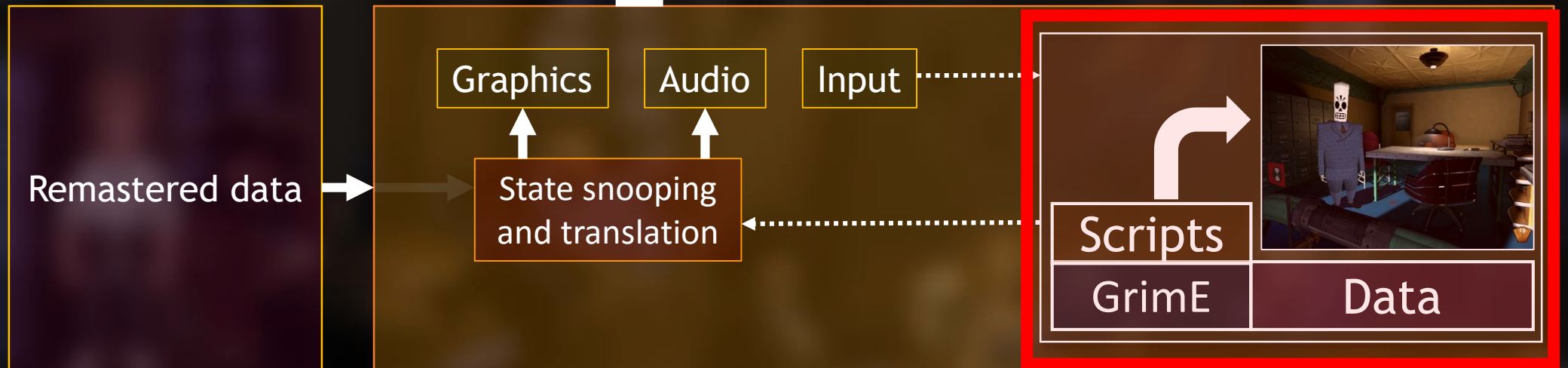


Original

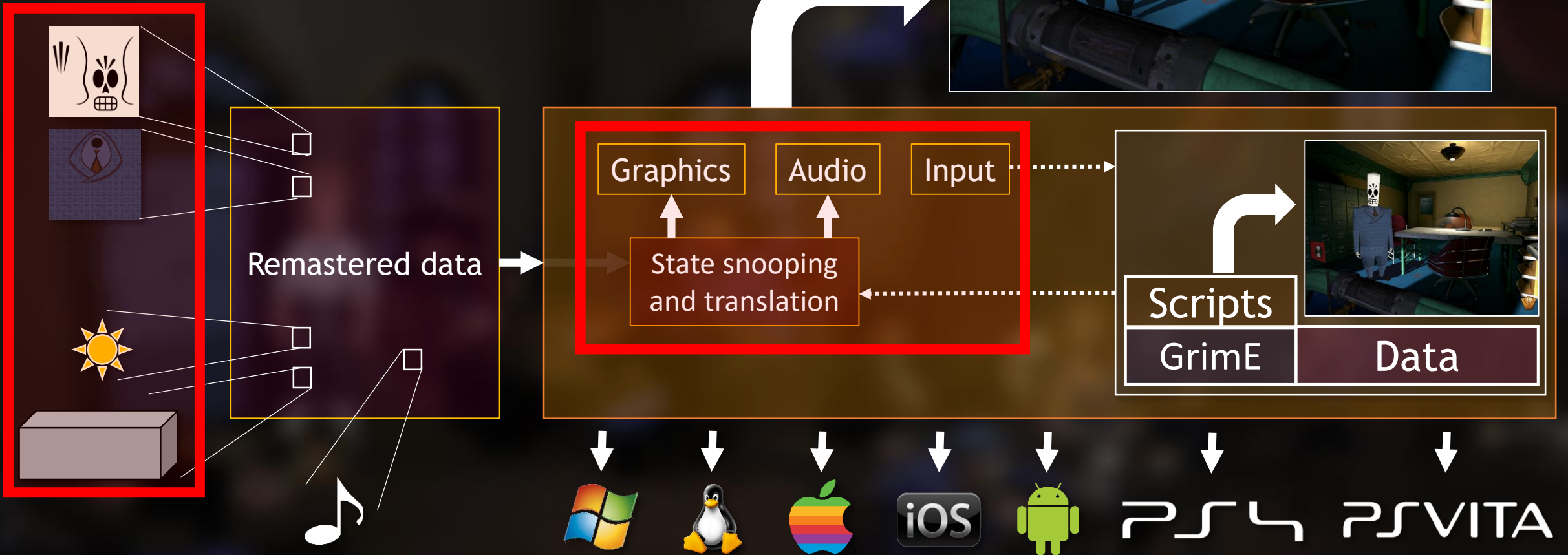


Remastered

'Grimastered' tech



'Grimastered' tech





Original



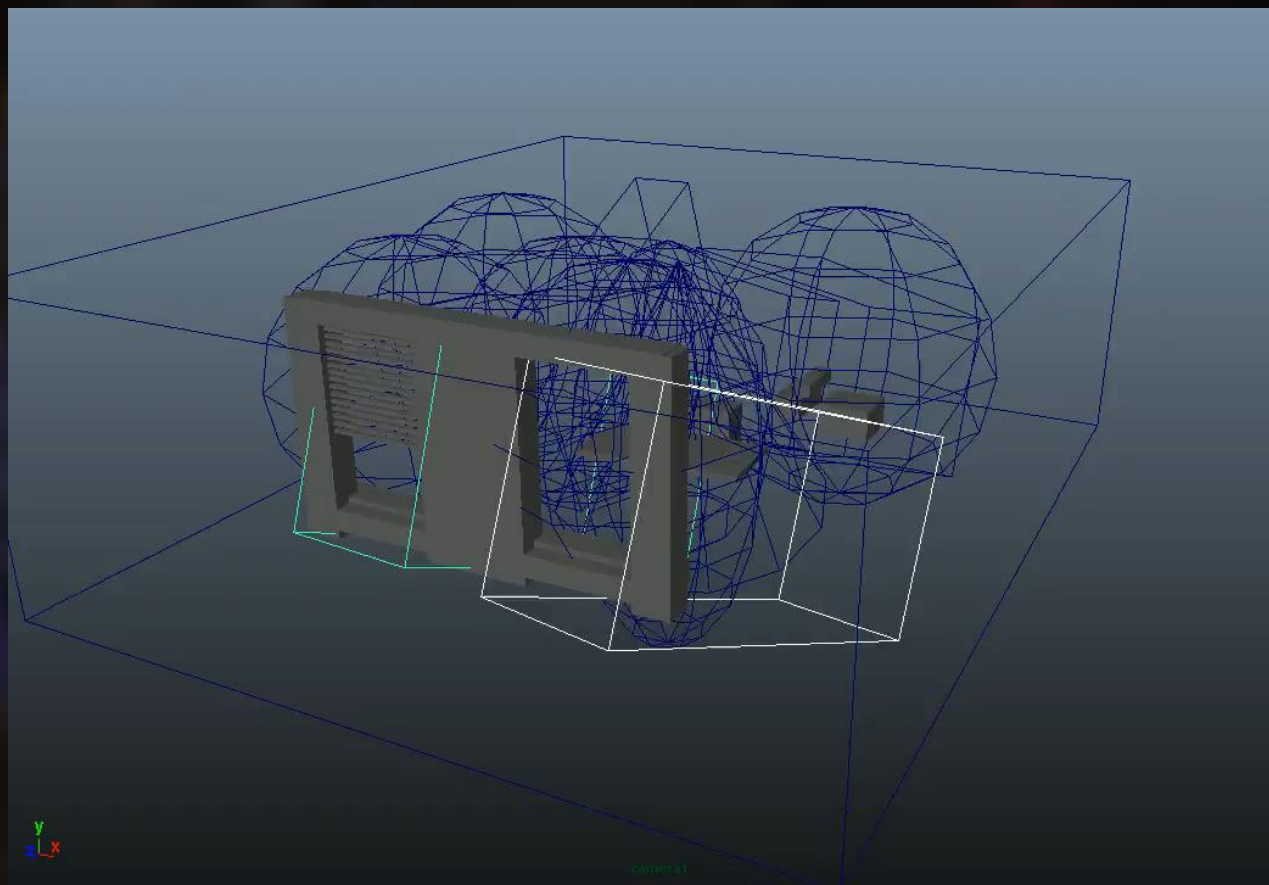
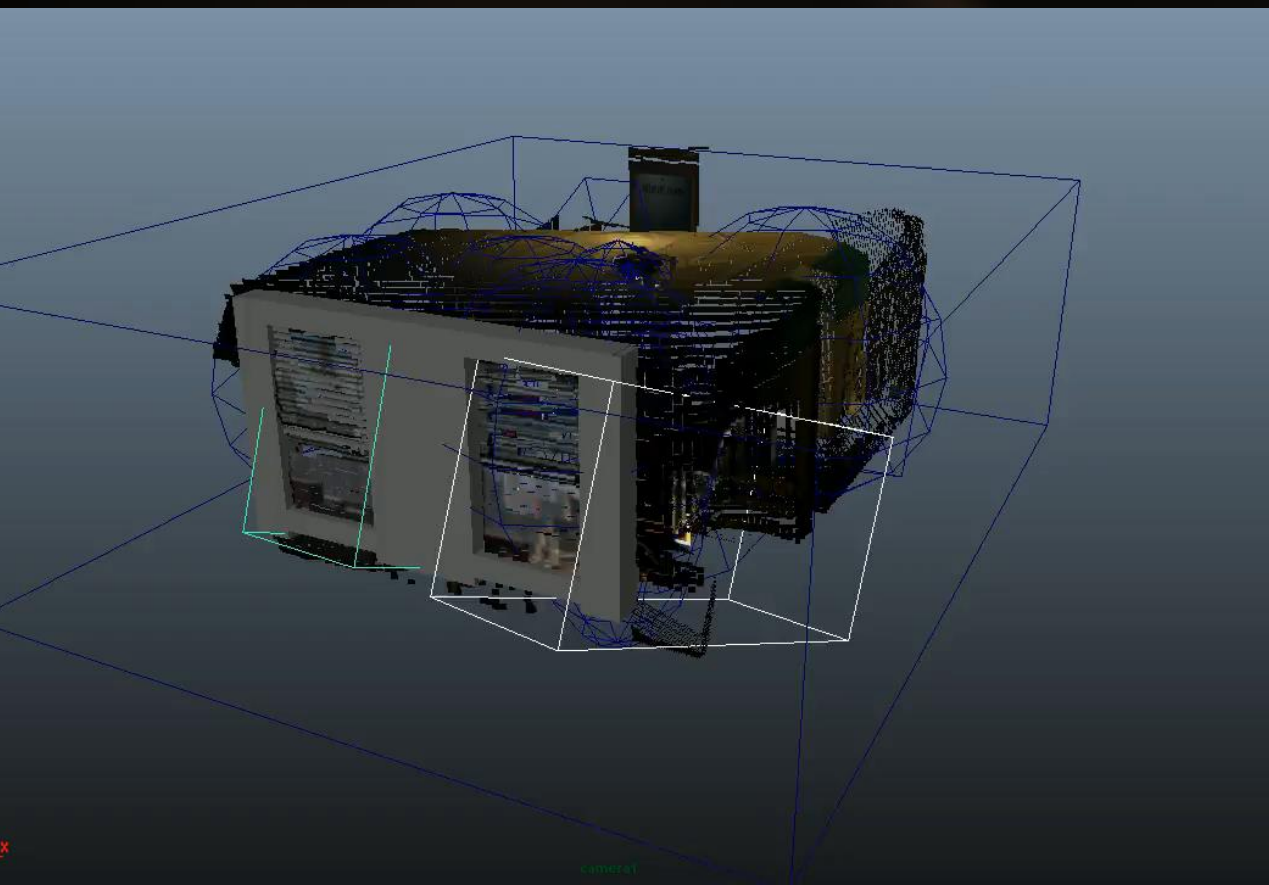
Remastered



Original



Remastered





funded with
KICK STARTER



REDS



Broken Age tech (DF Moai)

Game-logic scripts



Lua 5.1

DF extensions



Data





Apple tv



iOS

OUYA

PS4

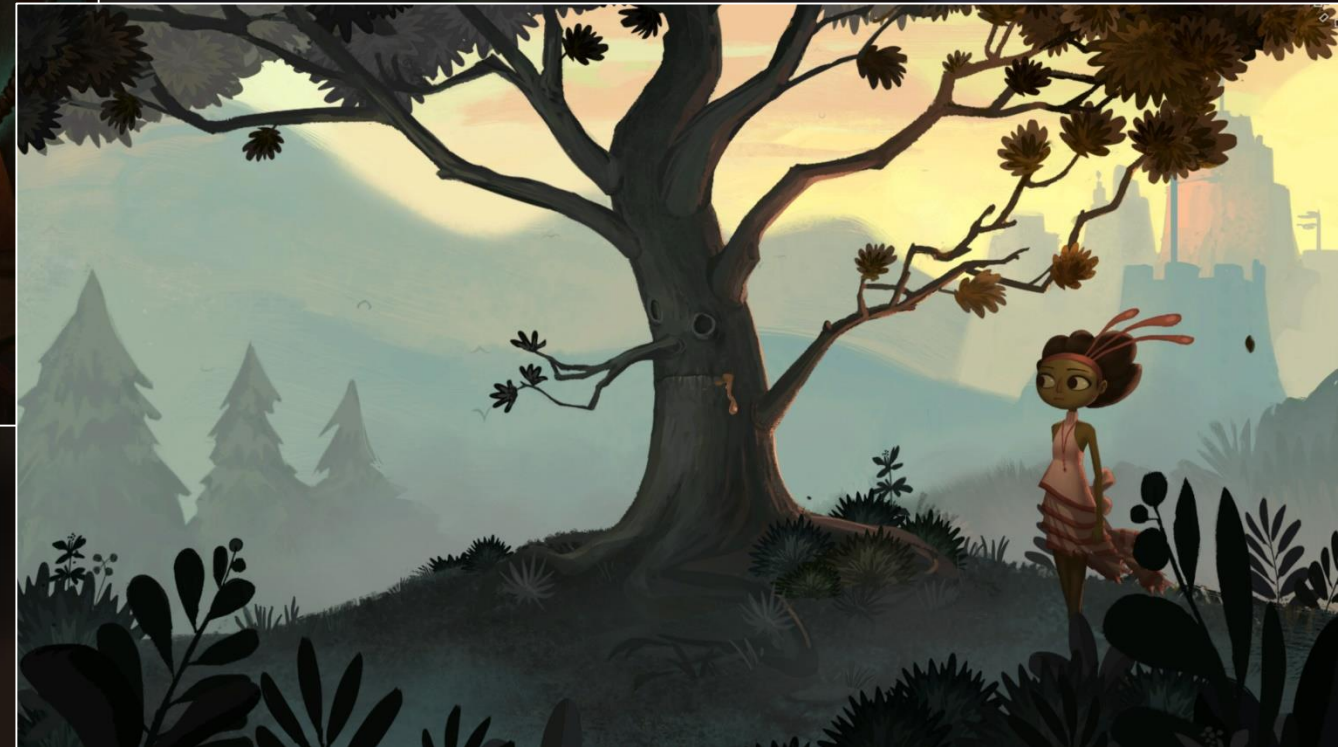
PSVITA

Example script

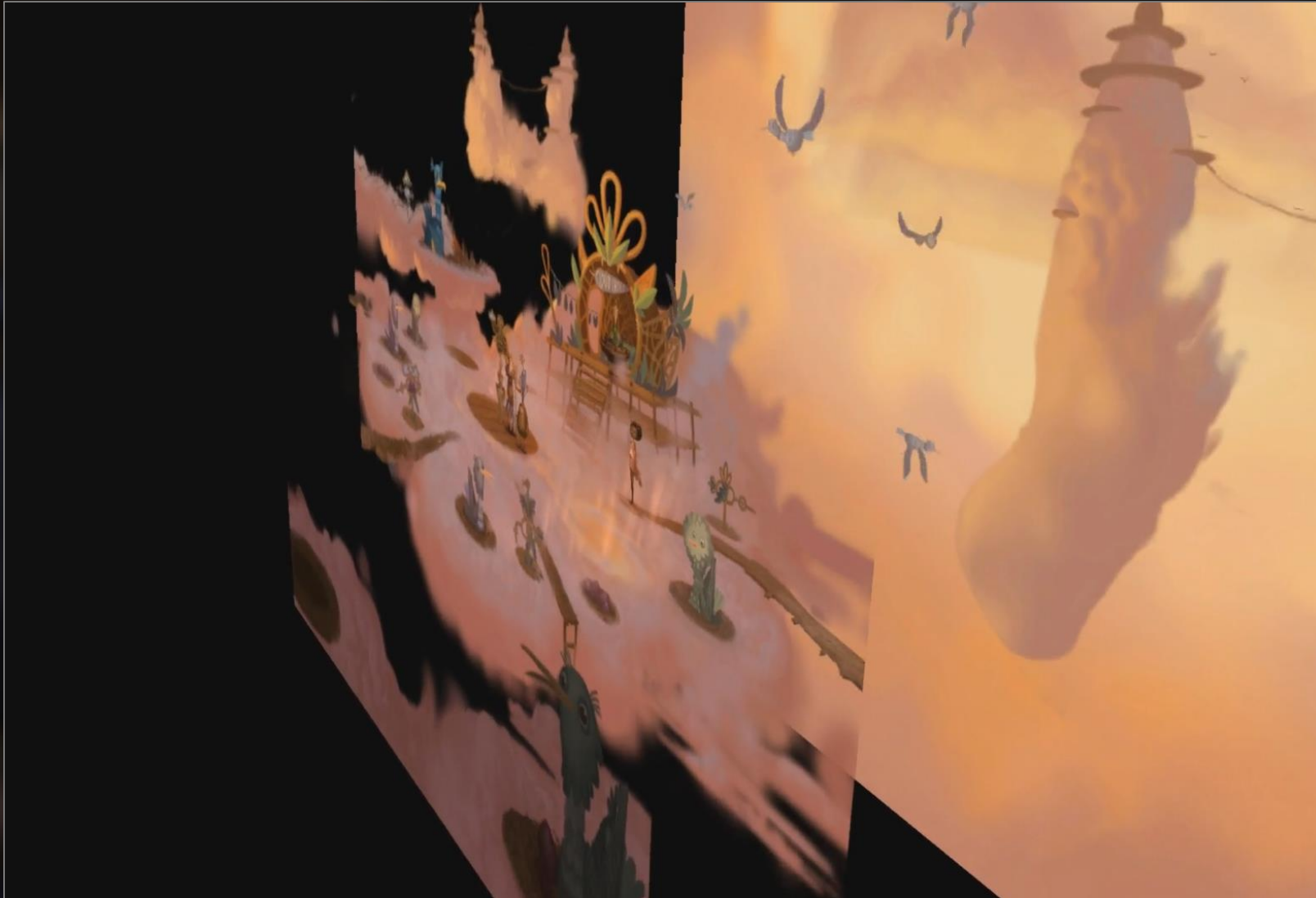
```
function CloudColony_Main:_onWalkToElderSignFinished(rItem)
    if GameStateManager.getValueFor('CC_bVisitedElderArea') then
        self.rGirl.CoVoice:playDialogSet( 'InspectElderSignLine',
            RESOURCE('Dialog/CloudColony/Girl.lua') )
    else
        self.rGirl.CoVoice:playDialogSet( 'InspectElderSignLinePre',
            RESOURCE('Dialog/CloudColony/Girl.lua'), true )
    end
end
```



Anatomy of a scene: Backgrounds



Anatomy of a scene: Backgrounds



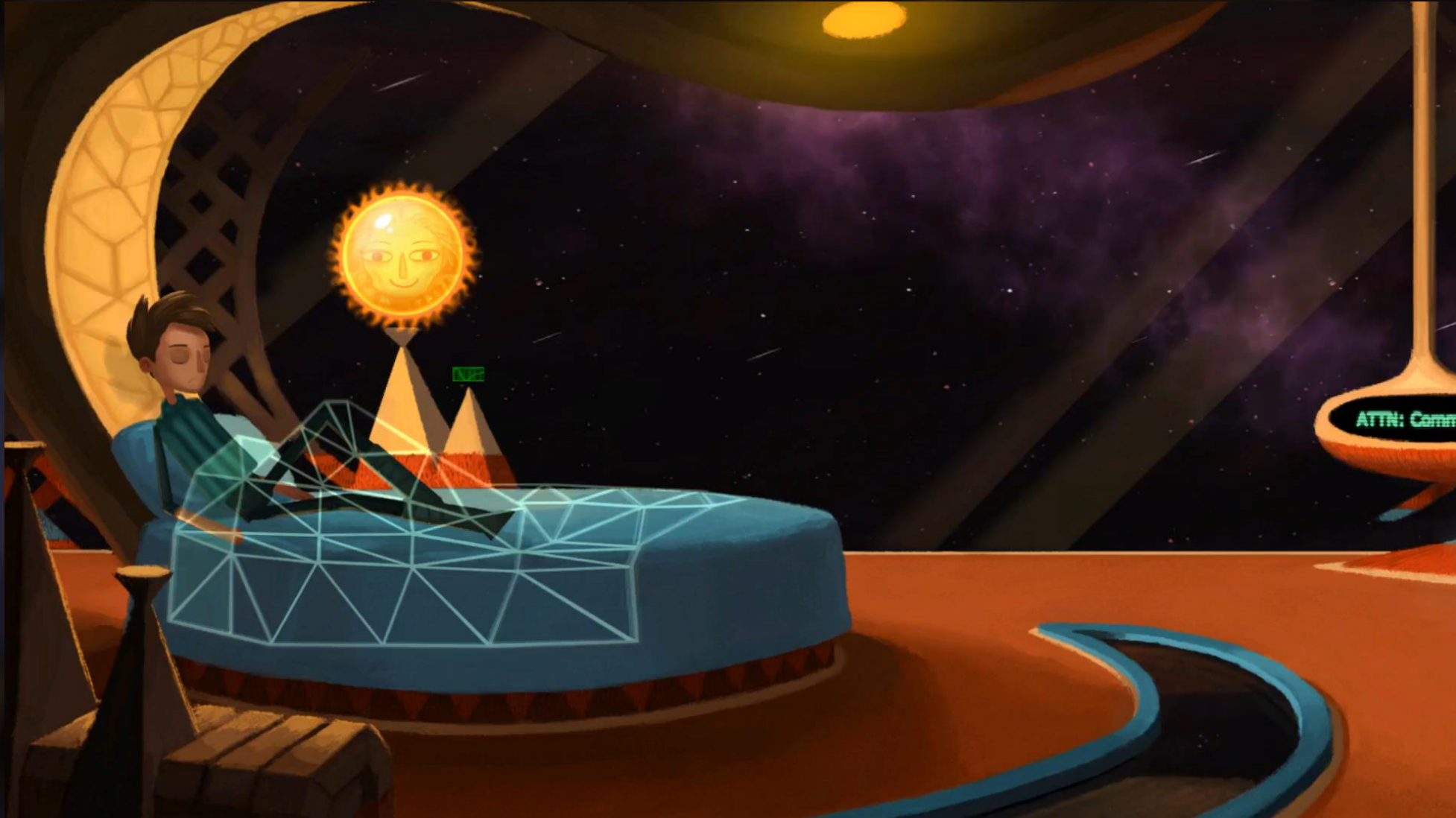
Anatomy of a scene: Volumes



Anatomy of a scene: Characters



Anatomy of a scene: Animations




Anatomy of a scene: Lighting



There is so much more...



Thanks!

 p1xelcoder

Resources

- SCUMM

- http://www.wilmunder.com/Arics_World/Games.html
- http://www.gamasutra.com/view/feature/196009/the_scumm_diary_stories_behind_.php
- <http://alexyoung.org/2011/05/07/scumm/>

- Grim Fandango

- <http://www.grimfandango.net/features/articles/lua-in-grim-fandango>
- <http://www.grimfandango.net/features/interviews/interview-with-bret-mogilefsky>
- <http://lua-users.org/lists/lu-l/2001-05/msg00149.html>